

Contactor, TeSys Deca, 3P(3 NO), AC-3/AC-3e, <=400V, 40A, 110V AC 50/60Hz coil, spring terminals

LC1D40A3F7

Main

Range	TeSys TeSys Deca
Range of product	TeSys Deca
Product or component type	Contactor
Device short name	LC1D
Contactor application	Resistive load Motor control
Utilisation category	AC-4 AC-1 AC-3 AC-3e
Poles description	3P
[Ue] rated operational voltage	Power circuit: <= 690 V AC 25400 Hz Power circuit: <= 300 V DC
[le] rated operational current	60 A (at <60 °C) at <= 440 V AC AC-1 for power circuit 40 A (at <60 °C) at <= 440 V AC AC-3 for power circuit 40 A (at <60 °C) at <= 440 V AC AC-3e for power circuit
[Uc] control circuit voltage	110 V AC 50/60 Hz

Complementary

Motor power kW	18.5 kW at 380400 V AC 50/60 Hz (AC-3)
	11 kW at 220230 V AC 50/60 Hz (AC-3)
	22 kW at 415440 V AC 50/60 Hz (AC-3)
	22 kW at 500 V AC 50/60 Hz (AC-3)
	30 kW at 660690 V AC 50/60 Hz (AC-3)
	9 kW at 400 V AC 50/60 Hz (AC-4)
	18.5 kW at 380400 V AC 50/60 Hz (AC-3e)
	11 kW at 220230 V AC 50/60 Hz (AC-3e)
	22 kW at 415440 V AC 50/60 Hz (AC-3e)
	22 kW at 500 V AC 50/60 Hz (AC-3e)
	30 kW at 660690 V AC 50/60 Hz (AC-3e)
Motor power hp	5 hp at 230/240 V AC 50/60 Hz for 1 phase motors
	10 hp at 230/240 V AC 50/60 Hz for 3 phases motors
	30 hp at 575/600 V AC 50/60 Hz for 3 phases motors
	10 hp at 200/208 V AC 50/60 Hz for 3 phases motors
	3 hp at 115 V AC 50/60 Hz for 1 phase motors
	30 hp at 460/480 V AC 50/60 Hz for 3 phases motors
Compatibility code	LC1D
Pole contact composition	3 NO
Protective cover	With
[Ith] conventional free air thermal current	10 A (at 60 °C) for signalling circuit 60 A (at 60 °C) for power circuit

Irms rated making capacity	140 A AC for signalling circuit conforming to IEC 60947-5-1
	250 A DC for signalling circuit conforming to IEC 60947-5-1
	800 A at 440 V for power circuit conforming to IEC 60947
Rated breaking capacity	800 A at 440 V for power circuit conforming to IEC 60947
[Icw] rated short-time withstand	320 A 40 °C - 10 s for power circuit
current	720 A 40 °C - 1 s for power circuit
	72 A 40 °C - 10 min for power circuit
	165 A 40 °C - 1 min for power circuit
	100 A - 1 s for signalling circuit
	120 A - 500 ms for signalling circuit
	140 A - 100 ms for signalling circuit
Associated fuse rating	10 A gG for signalling circuit conforming to IEC 60947-5-1
_	80 A gG at <= 690 V coordination type 1 for power circuit
	80 A gG at <= 690 V coordination type 2 for power circuit
Average impedance	1.5 mOhm - Ith 60 A 50 Hz for power circuit
Power dissipation per pole	2.4 W AC-3
Tower dissipation per pole	5.4 W AC-1
	2.4 W AC-3e
[Ui] rated insulation voltage	Power circuit: 600 V CSA certified
	Power circuit: 600 V UL certified
	Signalling circuit: 690 V conforming to IEC 60947-1
	Signalling circuit: 600 V CSA certified
	Signalling circuit: 600 V UL certified
	Power circuit: 690 V conforming to IEC 60947-4-1
Overvoltage category	III
Pollution degree	3
[Uimp] rated impulse withstand voltage	6 kV conforming to IEC 60947
Safety reliability level	B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1
	B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO
	13849-1
Mechanical durability	6 Mcycles
Electrical durability	1.4 Mcvcles 60 A AC-1 at Ue <= 440 V
,	1.5 Mcycles 40 A AC-3 at Ue <= 440 V
	1.5 Mcycles 40 A AC-3e at Ue <= 440 V
Control circuit type	AC at 50/60 Hz
Coil toobnology	Mrs. 11 %:
Coil technology	Without built-in suppressor module
Control circuit voltage limits	0.30.6 Uc (-4070 °C):drop-out AC 50/60 Hz
	0.81.1 Uc (-4060 °C):operational AC 50 Hz
	0.851.1 Uc (-4060 °C):operational AC 60 Hz
	11.1 Uc (6070 °C):operational AC 50/60 Hz
Inrush power in VA	140 VA 60 Hz cos phi 0.75 (at 20 °C)
·	160 VA 50 Hz cos phi 0.75 (at 20 °C)
Hold in nouser consumption in VA	40.VA 00.H=k: 0.0 (-4.00 °0)
Hold-in power consumption in VA	13 VA 60 Hz cos phi 0.3 (at 20 °C) 15 VA 50 Hz cos phi 0.3 (at 20 °C)
Heat dissipation	45 W at 50/60 Hz
Operating time	419 ms opening
	1226 ms closing
Maximum operating rate	3600 cyc/h at 60 °C
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Connections - terminals	Control circuit: spring terminals 1 0.752.5 mm² - cable stiffness: flexible without cable end
	Control circuit: spring terminals 2 0.752.5 mm ² - cable stiffness: flexible without cable end
	Power circuit: EverLink BTR screw connectors 1 135 mm² - cable stiffness: flexible without cable end
	Power circuit: EverLink BTR screw connectors 2 125 mm² - cable stiffness: flexible without cable end
	Power circuit: EverLink BTR screw connectors 1 135 mm² - cable stiffness: flexible with cable end
	Power circuit: EverLink BTR screw connectors 2 125 mm² - cable stiffness: flexible with cable end
	Power circuit: EverLink BTR screw connectors 1 135 mm² - cable stiffness: solid without cable end
	Power circuit: EverLink BTR screw connectors 2 125 mm² - cable stiffness: solid without cable end
Tightening torque	Power circuit: 8 N.m - on EverLink BTR screw connectors - cable 2535 mm²
	hexagonal screw head 4 mm Power circuit: 5 N.m - on EverLink BTR screw connectors - cable 0.7525 mm² hexagonal screw head 4 mm
	Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver pozidriv No 2 Power circuit: 2.5 N.m - on screw clamp terminals - with screwdriver pozidriv No 2
Auxiliary contact composition	1 NO + 1 NC
Auxiliary contacts type	type mechanically linked 1 NO + 1 NC conforming to IEC 60947-5-1 type mirror contact 1 NC conforming to IEC 60947-4-1
Signalling circuit frequency	25400 Hz
Minimum switching voltage	17 V for signalling circuit
Minimum switching current	5 mA for signalling circuit
Insulation resistance	> 10 MOhm for signalling circuit
Non-overlap time	1.5 ms on de-energisation between NC and NO contact 1.5 ms on energisation between NC and NO contact
Mounting support	Rail Plate
Environment	
Standards	EN 60947-4-1 EN 60947-5-1
	IEC 60947-4-1
	IEC 60947-5-1
	CSA C22.2 No 14 UL 60947-4-1
	IEC 60335-2-40:Annex JJ
	UL 60335-2-40:Annex JJ
	IEC 60335-1:Clause 30.2

Standards	EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 CSA C22.2 No 14 UL 60947-4-1 IEC 60335-2-40:Annex JJ UL 60335-2-40:Annex JJ IEC 60335-1:Clause 30.2	
Product certifications	CCC UL CB Scheme CSA CE UKCA Marine EAC	
IP degree of protection	IP20 front face conforming to IEC 60529	
Protective treatment	TH conforming to IEC 60068-2-30	
Climatic withstand	conforming to IACS E10 exposure to damp heat conforming to IEC 60947-1 Annex Q category D exposure to damp heat	
Permissible ambient air temperature around the device	-4060 °C 6070 °C with derating	
Operating altitude	03000 m	
Fire resistance	850 °C conforming to IEC 60695-2-1	
Flame retardance	V1 conforming to UL 94	

Mechanical robustness	Vibrations contactor open (2 Gn, 5300 Hz) Vibrations contactor closed (4 Gn, 5300 Hz) Shocks contactor closed (15 Gn for 11 ms) Shocks contactor open (10 Gn for 11 ms)	
Height	122 mm	
Width	55 mm	
Depth	120 mm	
Net weight	0.85 kg	

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	6.400 cm
Package 1 Width	13.700 cm
Package 1 Length	15.500 cm
Package 1 Weight	908.000 g
Unit Type of Package 2	S02
Number of Units in Package 2	10
Package 2 Height	15.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	9.895 kg
Unit Type of Package 3	P06
Number of Units in Package 3	160
Package 3 Height	77.000 cm
Package 3 Width	60.000 cm
Package 3 Length	80.000 cm
Package 3 Weight	166.820 kg

Contractual warranty

Warranty 18 months



Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing "Use Better, Use Longer, Use Again" campaign to extend product lifetimes and recyclability.

Environmental Data explained >

How we assess product sustainability >

☑ Environmental footprint	
Total lifecycle Carbon footprint	61
Environmental Disclosure	Product Environmental Profile

Use Better

⊗ Materials and Substances	
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
EU RoHS Directive	Compliant
REACh Regulation	REACh Declaration

Use Again

○ Repack and remanufacture	
End of life manual availability	End of Life Information
Take-back	No
WEEE Label	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Technical Illustration

Assembly's dimensions

